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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,264	10/21/2003	Roman Wrosz	AT-000217	4603
24710	7590	02/10/2006	EXAMINER	
ALIGN TECHNOLOGY, INC.			NGUYEN, THUKHANH T	
ATTENTION: SCOTT SMITH			ART UNIT	PAPER NUMBER
881 MARTIN AVENUE				
SANTA CLARA, CA 95050			1722	

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/690,264	WROSZ, ROMAN	
	Examiner Thu Khanh T. Nguyen	Art Unit 1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 01 November 2005.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-48 is/are pending in the application.  
 4a) Of the above claim(s) 17-48 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-16 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>10/18/04 &amp; 10/21/03</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION*****Election/Restrictions***

1. Applicant's election of group I, claims 1-16 in the reply filed on June 7, 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2 and 5-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Usui (6,488,074).

Usui discloses an apparatus for casting dental prosthesis comprising a plurality of unit, such as a ring-placing platform C, crucible-placing platform D, ring conveyor E, crucible conveyer F, burning unit G and casting unit H, wherein the casting unit is a chamber includes a cylindrical container (50) for better control of the casting condition (col. 8, lines 50-58).

Usui fails to disclose that each unit is a chamber.

Usui discloses that the burning unit includes two tightly closed furnaces (41, 42), which is equivalent to an oven chamber. It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Usui by separating each unit into a

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different chamber as with the burning unit and the casting unit in order to better control at each unit and to prevent contamination at each station.

Usui further discloses an inline crucible placing system F, and a clamp system (30-34) for holding and placing the crucible (col. 7, lines 50-54).

Usui further discloses a plug, or cover (60) and an engaging member (66) for placing the cover (60) over the casting mold container (50).

4. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Usui (6,488,074) as applied to claims 1-2, 5-12 above, and further in view of Carrara (5,073,329).

Usui fails to disclose the workpiece introduction system, or the conveyor system is a rotary turret system.

Carrara discloses an apparatus for molding system including a rotary transfer system (6) for transfer the mold (2) through different stations (3, col. 2, lines 56-65).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Usui by replacing the inline system by a rotary turret system as taught by Carrara in order to move the molds through different stations simultaneously in a more compact space because the rotary table system would take less space than the inline conveyor system.

5. Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Usui (6,488,074) as applied to claims 1-2 and 5-12 above, and further in view of Culp et al (6,976,627).

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Usui fails to disclose a laser-marking system and a CNC trimming system.

Culp et al disclose an apparatus for identification and customized dental molds, comprising a laser marker system (col. 5, lines 65-67) and a CNC cutter system that can be aligned and trimmed at different angle depending on the geometry of the dental product.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Usui by providing a laser marker system and a CNC cutter system as taught by Culp et al in order to identify and finish the molded product.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Khanh T. Nguyen whose telephone number is 571-272-1136.

The examiner can normally be reached on Monday- Friday, 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Joseph S. Del Sole*  
JOSEPH S. DEL SOLE  
PRIMARY EXAMINER  
2/6/06

TN